

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for regulating during driving the air resistance to a leading and at least one following vehicle, the method comprising:

using a distance sensor to detect detecting a distance between the leading vehicle and the at least one following vehicle, the leading vehicle not being connected to the at least one following vehicle; and

regulating a magnitude of a wake formed behind the leading vehicle according to the detected distance between the leading and the following vehicles in order to optimize an overall air resistance to both the leading and the at least one following vehicle, the regulating of the magnitude of the wake being accomplished using an active boundary layer control positioned on the leading vehicle.

2. (Previously Presented) A method according to claim 1, wherein the regulating of the magnitude of the wake behind the leading vehicle comprises switching the active boundary layer control off when the distance between the leading and the at least one following vehicle decreases to below a predetermined value.

3. (Previously Presented) A device for regulating during driving the air resistance to a leading and at least one following vehicle, the device comprising:

an active boundary layer control positioned on the leading vehicle, the active boundary layer control being operable for regulating a magnitude of a wake formed behind the leading vehicle;

a distance sensor at the leading vehicle, the distance sensor being operable for measuring a distance between the leading and the at least one following vehicle, the leading vehicle not being connected to the at least one following vehicle; and

a control device operable for controlling the active boundary layer control according to

the distance detected by the sensor, in order to optimize an overall air resistance to the leading and the following vehicle.

4. (Currently Amended) A computer program comprising:

a computer-readable code recorded on a computer-readable media which, when run on a computer, causes a control device to regulate an air resistance to a leading vehicle and at least one following vehicle, the leading vehicle not being connected to the at least one following vehicle, the computer-readable code causing the control device to regulate the air resistance by detecting a distance between the leading vehicle and the at least one following vehicle and by using an active boundary layer control positioned on the leading vehicle to regulate a magnitude of a wake formed behind the leading vehicle according to the detected distance to optimize an overall air resistance to both the leading and the at least one following vehicle.

5. (Currently Amended) A computer program product comprising;

a support; and

a computer program including a computer-readable code which, when run on a computer, causes a control device to regulate an air resistance to a leading vehicle and at least one following vehicle, the leading vehicle not being connected to the at least one following vehicle, the computer-readable code causing the control device to regulate the air resistance by detecting a distance between the leading vehicle and the at least one following vehicle and by using an active boundary layer control positioned on the leading vehicle to regulate a magnitude of a wake formed behind the leading vehicle according to the detected distance to optimize an overall air resistance to both the leading and the at least one following vehicle according to claim 4, the computer program being recorded on the support.

6. (Previously Presented) A method according to claim 2, wherein the regulating further comprises switching on and using the active boundary layer control to reduce the magnitude of the wake as the distance between the leading and the at least one following vehicle increases above a respective predetermined value.

7. (Previously Presented) A method according to claim 6, wherein the regulating further comprises using the active boundary layer control to increase the magnitude of the wake as the distance between the leading and the at least one following vehicle decreases below the respective predetermined value.

8. (Previously Presented) A device according to claim 3, wherein the leading vehicle comprises a rear edge facing the at least one following vehicle and the active boundary layer control comprises an air flow device positioned on the leading vehicle and distanced from the rear edge of the leading vehicle in a direction away from the at least one following vehicle, the air flow device being operable to affect an air flow past the leading vehicle for regulating the wake.

9. (Previously Presented) A device according to claim 8, wherein the air flow device is operable to direct air inwardly from a surface of the leading vehicle past which air flows during driving.